

ABSTRACT OF THE DISCLOSURE

An optical switch having a plurality of switch cells. The optical switch has n inputs (n is a natural number) and m outputs (m is a natural number). The optical switch has a unit size defined as the distance between any two adjacent ones of the switch cells. The optical switch comprises a substrate having a switch size of $K \times L$ (K is an integer satisfying $n \leq K$, and L is an integer satisfying $m \leq L$), first and second mirrors parallel to each other and perpendicular to a principal surface of the substrate, and an optical unit providing a plurality of input optical paths for the n inputs and a plurality of output optical paths for the m outputs. The plurality of input optical paths are inclined relative to the first and second mirrors, and the plurality of output optical paths are inclined relative to the first and second mirrors. Each switch cell comprises a switch mirror provided movably relative to the substrate. With this configuration, the path dependence of loss is substantially eliminated.